PATENT CLAIMS

Sub a1

1. Closed injection moulded closure (20) having a first closure part (21, 62), a second closure part (22, 63) and a hinge connection actively connecting them, characterized in that the closure parts (21, 22, 62, 63) have no main hinge connection between them and that the closure parts (21, 22, 62, 63) are connected to one another by at least two connecting elements (23.1, 23.2) via two hinge connections (24.1, 24.2, 25.1, 25.2) each bordering said connecting elements on nonadjacent sides, two hinge connections (24.1, 25.1, 24.2, 25.2) each bordering a connecting element (23.1, 23.2) making an angle (ϕ) with one another and planes (31, 32), defined by two hinge connections (24.1, 25.1, 24.2, 25.2) each bordering a connecting element (23.1, 23.2), making an angle (ω) with one another.

2. Closed injection moulded plastics closure (20) according to Patent Claim 1, characterized in that the movable closure part (22) has at least two stable positions relative to the fixed closure (21).

3. Closed injection moulded plastics closure (20) according to Patent Claim 2, characterized in that the closure parts (21, 22, 23.1, 23.2, 62, 63) in the open state have no geometric deformation relative to the injection moulded state.

4. Closed injection moulded plastics closure (20) according to any of Patent Claims 1 to 3, characterized in that the closure parts (21, 22, 23.1, 23.2, 62, 63) are functionally separated from one another by gaps (33 to 38).

5. Closed injection moulded plastics closure (20) according to Patent Claim 4, characterized in that at least one of the gaps (33 to 38, 68) has elements (39) which connect the closure parts (21, 22, 23.1, 23.2, 62, 63) to one another and which are destroyed when the closure (20) is opened for the first time.

6. Closed injection moulded plastics closure (20) according to any of Patent Claims 1 to 5, characterized in that the closure parts (21, 22, 23.1, 23.2, 62, 63) are connected to one another by a tear-off lip which is removed before opening for the first time.

7. Closed injection moulded plastics closure (20) according to any of Patent Claims 1 to 6, characterized in that the first closure part (22, 62) has an active element (57) which, in the closed position of the closure (20), has an active connection to a counter-element (58) and prevents unintentional opening of the closure (1, 20).

8. Closed injection moulded plastics closure (20) according to Patent Claim 7, characterized in

that the closure (20) is opened by lateral pressure on the first closure part (22, 62).

9. Closed injection moulded plastics closure (20) according to any of the preceding Patent Claims, characterized in that the relationship between an opening angle (α) of the closure (20) and the angles (ω) and (ϕ) is given by the following formula: $\phi = 2 \cdot \arctan\left[\frac{\sin(\alpha / 2)}{1 - \cos(\alpha / 2)} \cdot \sin(\omega / 2)\right]$.

10. Closed injection moulded plastics closure according to any of the preceding Claims, characterized in that the first closure part (62) is adjacent to the second closure part (63) and both closure parts (62, 63) are actively connected to a container (12), at least one closure part (63) being detachably and actively connected to the latter.

11. Closed injection moulded plastics closure according to any of the preceding Claims, characterized in that the connecting elements (23.1, 23.2) are arranged in a concave region of the closure contour.